Spin meeting minutes, 3/28/2007

The meeting focused on the coming AGS polarized proton commissioning. The draft of the run plan is on the web already. The primary goal is to test the high horizontal tune lattice ($\nu_x = 8.95$) which could eliminate the horizontal resonance effect. The solenoid snake will be tested as a knob for coupling correction at high energies. Mei asked if there is any MAD calculation for the solenoid effect on coupling. Nick said he did some calculation and detail discussion will follow. Woody reminded us again to get the ORM data for high tune without snakes. This is important as the data taken last run with both snakes on showing 6-fold symmetry. To cope with three programs using proton beams from linac (200MeV polarimeter, NSRL and AGS), question is raised if the DH1 magnet at the end of linac can function properly. It will be checked with Jim Alessi. Mei reported that the AGS BBQ may have the hardware ready after RHIC is in a smooth run. We would like to have a commissioning plan before we commit beam time to it. Mei and Leif pointed out that the beta function measurement with compensation quads does not work as there is no BPM adjacent to them. Nick will recheck the new lattice with high horizontal tune. The current version does not have constant horizontal tune after γ=18. Leif stated that the required horizontal chromaticity for the horizontal tune shift is not worse than what we have right now, we should still be able to get horizontal tune measurement. Kevin asked what kind of resonance correction scheme we have in hands. Besides correction dipoles, skew quads, I10 solenoid, Woody suggested to investigate the 27θ correction with tunes setting near 2/3. The 27θ correction may be important when both tunes close to 9.

We would also like to explore the possible polarization at the beginning part of the energy ramp. Haixin suggested to continue with spin tracking for various tune path in this region (by Fanglei).

Haixin